In the Specification:

On page 1 before the first paragraph, please insert the following paragraph:

This application claims priority to International Application No. PCT/DE99/00068 which was published in the German language on January 14, 1999.

Page 1 before the first paragraph, please delete the following:

~~Description~~

On page 1, between lines 6 and 7 please insert the following headings:

TECHNICAL FIELD OF THE INVENTION

BACKGROUND OF THE INVENTION

Please delete lines 21-33 of page 1.

Please insert the following paragraphs between lines 33 and 34 of page 1 as follows:

Conventional speech recognition systems are therefore still not used for many applications, although in principle they would be suitable for them from the viewpoint of the user.

SUMMARY OF THE INVENTION

In one embodiment of the invention, there is a data processing system (DPCD) or communications terminal (DPCD) with a device (SRU) for recognizing speech having the following features, a speech recognition device to recognize acoustic objects (AO), the acoustic objects being individual letters, combinations of letters or control commands, or configured to recognize such objects; and a device for the acoustic output (DU) or optical display (DU) of recognized acoustic objects (RAO).

In one aspect of the invention, the speech recognition device (SRU) configured such that the recognition of a control command causes the output or display of an acoustic object to trigger the output or display of a further acoustic object.

In another aspect of the invention, a data memory (MU) which is configured such that the recognition of an acoustic object or a sequence of objects which corresponds to an entry in the data memory triggers the display or output of the entry (ME) or a function (FU) of the system associated with the entry.

In still another aspect of the invention, a recognition capacity is improved by a comparison of possible objects or object sequences with existing entries in the data memory (MU).

In yet another aspect of the invention, the speech recognition device brought, with the aid of certain control commands, into specific operating states for the recognition of individual letters, combinations of letters or control commands.

In another embodiment of the invention, there is a method for recognizing acoustic objects, recognizing acoustic objects using a speech recognition algorithm, individual letters, combinations of letters or control commands, or configuring the algorithm to recognize such objects and; acoustically outputting or optically displaying recognized acoustic objects.

In one aspect of the invention, wherein recognition of a control command causes the output or display of an acoustic object to trigger the output or display of a further acoustic object.

In another aspect of the invention, wherein the recognition of an acoustic object or a sequence of objects which corresponds to an entry in the data memory triggers the display or output of the entry or a function of the system associated with the entry.

In still another aspect of the invention, a recognition capacity is improved by a comparison of possible objects or object sequences with existing entries in the data memory.

In yet another aspect of the invention, the speech recognition algorithm is brought, with the aid of certain control commands, into specific operating states for the recognition of individual letters, combinations of letters or control commands.

BRIEF DESCRIPTION OF THE DRAWINGS

The invention is explained in more detail below on the basis of preferred exemplary embodiments with the aid of the figure.

Figure 1 shows an exemplary structure and mode of operation of a preferred embodiment of a system according to the invention.

DETAILED DESCRIPTION OF THE INVENTION

The invention is based on specifying a technical teaching which makes it possible for speech recognition to be used, even for those applications where relatively great expenditure has to be ruled out for economic or other reasons. This can be achieved by a data processing system or communications terminal with a device for recognizing speech or by a method for recognizing certain acoustic objects according to the invention.

Please replace the paragraph beginning on line 34 of page 1 with the following rewritten paragraph:

In the invention, a data processing system or communications terminal, has a device for recognizing speech which is set up specifically to recognize certain acoustic objects, to be specific individual letters, combinations of letters or control commands, or can be specifically configured to recognize such objects.

Please replace the paragraph beginning on line 14 of page 2 with the following rewritten paragraph:

If the user establishes a misrecognition on the basis of the acoustic output or optical display, the user can repeat the acoustic input of the object to be recognized. Since this process may not lead to correct recognition quickly the speech recognition device is set up, or can be

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configured, in such a way that the recognition of a certain first control command has the effect following the output or display of an acoustic object of triggering the output or display of a further acoustic object in the preferred embodiment. This enables the user after the output or display of an acoustic object, that is for example after an established misrecognition, to make the system output a further acoustic object by the acoustic input of a special acoustic object, to be specific a control command.

Please delete lines 12 and 19 of page 3.

Please replace the paragraph beginning on line 20 of page 3 with the following rewritten paragraph:

Referring to Figure 1, this embodiment of a data processing system (DPCD) or communications terminal (DPCD) according to the invention comprises a speech recognition unit (SRU), which recognizes acoustic objects (AO) spoken by a user of the system and feeds the recognized acoustic objects (RAO) to a device for acoustic output or optical display (DU). According to the present invention, the speech recognition device is set up to recognize certain acoustic objects (AO), to be specific individual letters, combinations of letters or control commands, or can be configured to recognize such objects.

Please replace the paragraph beginning on line 33 of page 3 with the following rewritten paragraph:

The speech recognition device consequently assigns to an acoustic object (AO) spoken by the user in each case an acoustic object recognized by this device (RAO). Since the recognition of natural speech is subject to uncertainty for fundamental reasons, the recognized acoustic object will generally be, depending on the speech recognition algorithm used, the most probable or most plausible acoustic object that comes into consideration, taking into account the determined features of the spoken acoustic object.

Please replace the paragraph beginning on line 7 of page 4 with the following rewritten paragraph:

The user receives via the output or display device (DU) an acknowledgement message concerning the result of the recognition process. The user then has the possibility of responding to this according to the type of result involved. If the acoustic object was misrecognized, the user has the possibility of notifying the speech recognition algorithm that the acoustic object has not been correctly recognized, or that the user wanted to have a different object recognized, by saying a control command intended for this purpose, for example the word "again". The user then has the opportunity to say once again the object desired. This process can be continued until the speech recognition unit recognizes the desired object.

Please replace the paragraph beginning on line 21 of page 4 with the following rewritten paragraph:

The input of another control command, for example the word "incorrect", could control the speech recognition algorithm in such a way that a further acoustic object is output. Preferably that object of which the probability or plausibility is admittedly lower than that of the object previously output, but greater than that of all the other objects coming into consideration. In this case, it would not be necessary for the user to say the object again. Instead further candidates would continue to be offered for the object to be recognized until the user no longer inputs the corresponding control command or possibly inputs an expressly confirmatory command, for example "correct".

Please replace the paragraph beginning on line 34 of page 4 with the following rewritten paragraph:

According to a further embodiment, it is possible to provide a control command, for example the word "continue", which, when recognized following the speaking or display of an

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acoustic object, has the effect of triggering the display or output of an object which follows the former object. The sequence of the objects does not, in this case, have to be fixed by the magnitude of recognition probabilities or plausibility values. It may also be dictated by the sequence of entries in a memory unit (MU) of the system, or by alphabetical sequences of objects or sequences of objects semantically defined within a defined context. For example, the sequence of objects could be defined by the order within a database, a telephone directory or the structure of a file stored in the memory unit, for example a customer file, a dictionary, or similar files.

Please replace the paragraph beginning on line 13 of page 5 with the following rewritten paragraph:

Devices which are set up or can be configured for a certain function or mode of operation means that the corresponding functional features of these devices may be permanently or temporarily restricted. Furthermore, these devices can be set up or configured by all those involved between the manufacturer and the user by manufacturing processes, settings on the hardware or the use or parameterization of software or equivalent means or measures for a certain function or mode of operation. A person skilled in the art will readily deduce from this description numerous similar or equivalent means or measures for this purpose.

Please replace the paragraph beginning on line 5 of page 7 with the following rewritten paragraph:

With the present invention, the number of telephone entries which can be called up by voice selection in a mobile telephone or cordless phone or in a wire-bound telephone can therefore be increased. In the case of customary systems of this type, a limited number of entries was allowed for voice selection, from experience at most 20 or 30 entries. This was due to the memory space to be made available for the voice samples to be re-recognized, i.e. due to the resultant costs and space requirement. If the number of entries was further increased, experience

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showed that the effort for training the speech recognition increased considerably, which led to lower user acceptance.

Please replace the paragraph beginning on line 5 of page 7 with the following rewritten paragraph:

According to embodiment of the present invention, the speech recognition algorithm is trained by the user for the letters of the alphabet, and possibly combinations, and just a few control commands. It is in this way set up or appropriately configured by the user for the recognition of these acoustic objects. Interrogation takes place by the acoustic input of initial letters and (preferably up to two) subsequent letters. Misrecognitions are reduced by plausibility checks, i.e. for example by comparison of the objects with entries in a memory device. The names input are spoken once and converted in an encoder with a low bit rate (for example half rate of GSM) and stored at the corresponding memory location, possibly in a compressed form.

Please replace the paragraph beginning on line 35 of page 7 with the following rewritten paragraph:

Alternatively, a synthesis program which synthesizes voice from a name may also be used, possibly requiring less memory space. In any event, the speech recognition does not have to be trained for a large number of names, but only for a fixed set of approximately 30 sequences of letters and control commands.

One page 8, line 39, please replace "Patent Claims" with --WHAT IS CLAIMED IS--.

In the Claims:

1. (Amended) A system with a device for recognizing speech comprising:

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